

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

# PCT

To:

see form PCT/ISA/220

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/EP2004/051093

International filing date (day/month/year)  
11.06.2004

Priority date (day/month/year)  
13.06.2003

International Patent Classification (IPC) or both national classification and IPC  
H04B7/005

Applicant  
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### 1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

### 3. For further details, see notes to Form PCT/ISA/220.

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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material:  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing:  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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**Box No. II Priority**

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1. ☐ The following document has not been furnished:
- ☐ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).
  - ☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).
- Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.
2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:
- see separate sheet**

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**Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	1-14
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-14
Industrial applicability (IA)	Yes: Claims	1-14
	No: Claims	

2. Citations and explanations

**see separate sheet**

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**Box No. VIII Certain observations on the international application**

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The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

**Re Item V**

1. The following documents D1 to D2 are referred to in this communication, the numbering will be adhered to in the rest of the procedure.

D1: 3GPP: 'Physical channels and mapping of transport channels onto physical channels (FDD)' 3GPP TS 25.211 VERSION 4.3.0 RELEASE 4, December 2001 (2001-12), XP002260121

D2: WO 01 39540 A (ERICSSON TELEFON AB L M) 31 May 2001 (2001-05-31)

2. The present application does not meet the requirements of Article 33(1) PCT, because the subject-matter of independent claims 1, 13 and 14 is not inventive in the sense of Article 33(3) PCT.

- 2.1 Document D1 (the references in parentheses applying to this document) discloses as in claim 1:

A communications system (*see title of specification*) comprising

- a plurality of common channels including a primary common control physical channel (*see page 38 P-CCPCH, S-CCPCH, etc.*)
- a plurality of dedicated channels (*see page 38, DCH*)
- a synchronisation channel (*see page 38, SCH*)
- the primary common control physical channel (*see page 26, Figure 15: Time multiplexed transmission of Primary Common Control Physical Channel*) and the synchronisation channel (*see page 29, Figure 18: Time multiplexed transmission of SCH*) being transmitted time multiplexed.

- 2.2 The apparatus disclosed in claim 1 differs from that of D1 in that the reduction of the transmit power of dedicated channels during the transmission of the synchronisation channel is not explicitly mentioned. The problem to be solved can therefore be regarded as how to avoid that a maximum downlink output power is exceeded.

2.3 Document D2 (the references in parentheses applying to this document) discloses a solution to exactly this problem (*see page 2, lines 29-34*) for the communication system of D1. The system of D2 checks for the subsequent time slot, whether the total downlink power exceeds a maximum permitted level (*see page 8, lines 27-31*). If the maximum allowed output power is exceeded, requests for increase of output power for dedicated channel are rejected, only requests for decrease are accepted (*see page 10, lines 2-10*). If only requests for power decrease are accepted for the subsequent time slot, the sum of the output power of the dedicated channel decreases. In a system of D2 therefore the output power of the dedicated channels is reduced during the transmission of the synchronisation channel, if the total output power exceeds a maximum level.

Therefore a person skilled in the art arrives at the subject-matter of claim 1 by combining the teachings of D1 and D2 without an inventive step. Hence, the subject-matter of claim 1 does not meet the requirements of Article 56.

2.4 The method of independent claim 13 and the base station system of independent claim 14 correspond to the communication system of claim 1. Therefore the above argumentation correspondingly applies to these claims.

**Re Item VIII**

3. It is clear from the description on page 2, lines 11-23 and from Fig. 3 that the following feature is essential to the definition of the invention:

- (1) the reduction of the transmit power of dedicated channels being such that the total transmit power of the used channels is substantially constant and not above the amplifier power limit.

Since independent claims 1, 13 and 14 do not contain this feature it does not meet the requirement following from Article 6 PCT taken in combination with Rule 6.3(b) PCT that any independent claim must contain all the technical features essential to the definition of the invention.

4. The subject-matter of claim 1 does not meet the requirements of Article 6 PCT as the meaning of "the transmit power of dedicated channels being reduced" is not

clear. If there are a lot of dedicated channel assigned in a mobile radio system of D1 there will always be dedicated channels where the power is decreased during the transmission of the synchronisation channel " by accident". Therefore this lack of clarity also could be used to argue that the subject-matter of claim 1 is not novel and thus does not meet the requirements of Article 33(2) PCT. The question for the person skilled in the art is whether by "the transmit power of dedicated channels" it is meant "the **sum** transmit power of **the** dedicated **downlink** channels". The same objection is valid for independent claims 13 and 14.

5. Dependent claims 2-12 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step (Article 33(3) PCT), see documents D1, D2 and the corresponding passages cited in the search report.